

MODELS

CHP3PHAUX32A

CHP3PHAUX50A



## 3HP Auxiliary Relay Box

Operation & Installation Manual

# Rinnai

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## BEFORE USING THIS APPLIANCE

Before proceeding with the operation or installation read this manual thoroughly and gain a full understanding of the appliance, to ensure safe and correct use.

### IMPORTANT NOTICE FOR INSTALLERS

Please leave these instructions with the end user after commissioning of the system and alert the end user of the content sections "Warnings and "Periodic Inspection" and "Maintenance".

This appliance must be installed in accordance with:

- Manufacturer's Installation Instructions
- Current AS/NZS 3000
- Local Regulations and Municipal Building Codes including local OH&S requirements

This system must be installed, commissioned, serviced, maintained and removed **ONLY** by an Authorised Person.

For continued safety of this appliance it must be installed and maintained in accordance with the manufacturer's instructions.

# WARNINGS AND IMPORTANT INFORMATION

## SAFETY AND REGULATORY INFORMATION



**DO NOT** operate this system before reading the manufacturers instructions.

This appliance must be installed, commissioned and serviced by an authorised person in accordance with all applicable local rules and regulations.

Access covers of water heating system components will expose 415V wiring and **MUST** only be removed by an authorised person.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

For continued safety of this appliance it must be installed, operated and maintained in accordance with the manufacturer's instructions.

Children should be supervised to ensure they **DO NOT** play with the appliance.

The power mains must have a circuit breaker and it must be adequate for unit FLA. If the power supply cord is damaged, it **MUST BE** replaced by an authorised person in order to avoid a hazard. Take care not to touch the power connections or plugs with wet hands.

Care should be taken not to touch the pipe work as it may be **HOT!**

**DO NOT** place articles on or against this appliance.

**DO NOT** store chemicals or flammable materials near this appliance.

**DO NOT** operate with collectors or covers removed from this appliance.

**DO NOT** activate heat pump unless cylinder is full of water.

**NEVER** use a flammable spray such as hair spray, paint, etc near this unit as this may cause a fire.

At the end of the service life of the heat pump water heater and prior to being disposed of, a person qualified with refrigerant handling must recover the refrigerant from the system. The refrigerant must not be vented to atmosphere. Please call our National Help Line to arrange for an inspection.



## MANDATORY INSPECTION PRIOR TO INSTALLATION

Immediately report any damage or discrepancies to the Supplier of the appliance. This appliance was inspected and tested at the time of manufacture and packaging, and released for transportation without known damage. Upon receipt, inspect the exterior for evidence of rough handling in shipment. Ensure that the appliance is labelled correctly for the gas and electrical supply, and/or other services it is intended to be connected to.

For safety and warranty purposes, appliances that may be damaged or incorrect **MUST NOT** be installed or operated under any circumstances. Installation of damaged or incorrect appliances may contravene local government regulations. Rinnai disclaims any liability or responsibility whatsoever in relation to the installation or operation of damaged or incorrect appliances.

## NOTICE TO VICTORIAN CONSUMERS

This appliance must be installed by a person licensed with the Victorian Building Authority.

Only a licensed person will have insurance protecting their workmanship.

So make sure you use a licensed person to install this appliance and ask for your Compliance Certificate.

For further information contact the Victorian Building Authority on 1300 815 127

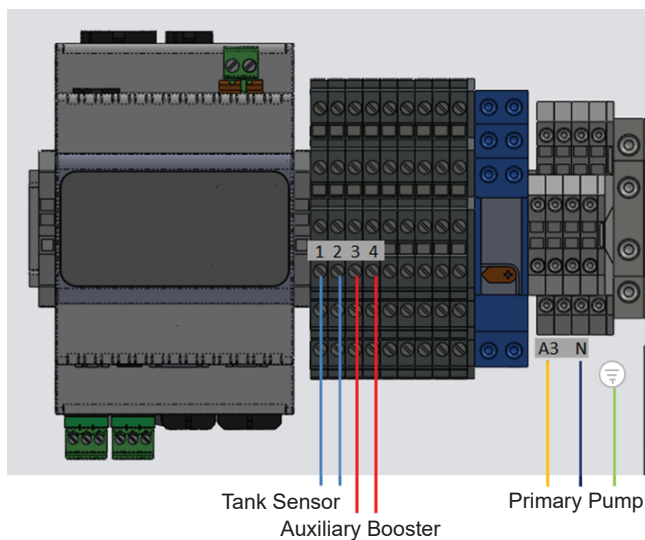
# BASIC OPERATION

The 3-phase auxiliary relay box is used in conjunction with Rinnai commercial heat pump and electric tank and operates by receiving “closed” signal from the heat pump.

Depending on the installation of heat pump hot water system, a 3-phase auxiliary relay box (i.e. auxiliary booster control box) may be supplied for supplementing heat at low ambient temperature. Terminals “3” and “4” from the heat pump provide a power free signal to control the auxiliary booster (as shown below). Use a minimum 0.75mm<sup>2</sup> two-core cable (provided by installer) to wire to heat pump terminals.

The auxiliary booster has been interlocked with the heat pump to only operate under low ambient or fault conditions.

- When ambient temperature falls below 5°C, auxiliary booster is activated. The auxiliary booster will operate until the tank sensor reaches the set point. Auxiliary booster will remain active until the ambient temperature reaches above 7°C. Heat pump and auxiliary booster may work simultaneously.
- When ambient temperature falls below 0°C, heat pump is deactivated. Heat pump won't activate until the ambient temperature reaches above 2°C. Only the auxiliary booster will operate until the tank sensor reaches the set point.
- When heat pump is in fault, auxiliary booster will operate instead of the heat pump until the tank sensor reaches the set point. Auxiliary booster will remain active until the heat pump fault is cleared.



## SPECIFICATIONS

	CHP3PHAUX32A	CHP3PHAUX50A
Power Supply	AC415V~50Hz	
Maximum Load Current Per Phase (A)	32	50
Maximum Load Rating (kW)	23	36
Dimensions (mm)	290 (H) ×240 (W) ×110 (D)	290 (H) ×240 (W) ×150 (D)
Net Weight (kg)	2.5	3
Colour	Grey	
Material	ABS	
Ingress Protection Rating	IP44	

**MAINS POWER CONNECTION**



The premises wiring to the heater **MUST** be capable of withstanding the appliance load. Refer to the “Specifications” table on page 4 for load details.

All electrical connections and wiring **MUST** be installed, maintained and removed by authorised persons in accordance with AS/NZS 3000, and all other relevant local regulations and municipal building codes including OH&S requirements.

Disconnect all power prior to installation and commissioning.



The 3-phase auxiliary relay box must be directly connected to a 415 V AC 50 Hz mains power supply. The 3-phase auxiliary relay box must be on its own circuit with an isolating switch installed at the switchboard. A secondary isolating switch must be installed within reach of the relay box.

Connect all **ACTIVE** and **NEUTRAL** wires in accordance with the wiring diagram. Ensure the incoming **EARTH** wire is securely fixed to the earth post.



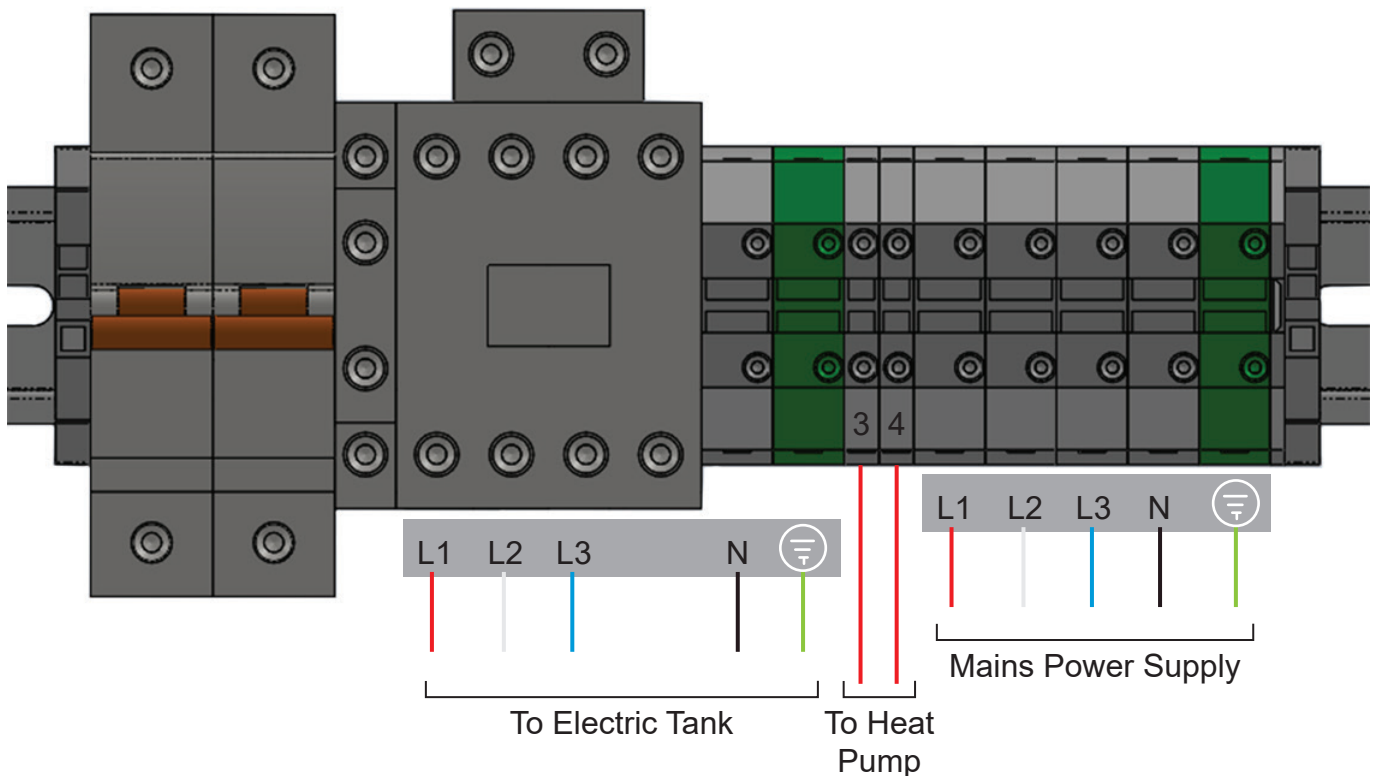
Select suitable cable size according to the electric element capacity of the tank. Normally each 3-phase auxiliary relay box works with one electric tank.

**AUXILIARY BOOSTER SIGNAL**

Wire terminals “3” and “4” to heat pump with a minimum 0.75mm<sup>2</sup> two-core cable (provided by installer). The cable length should be less than 10 metres.

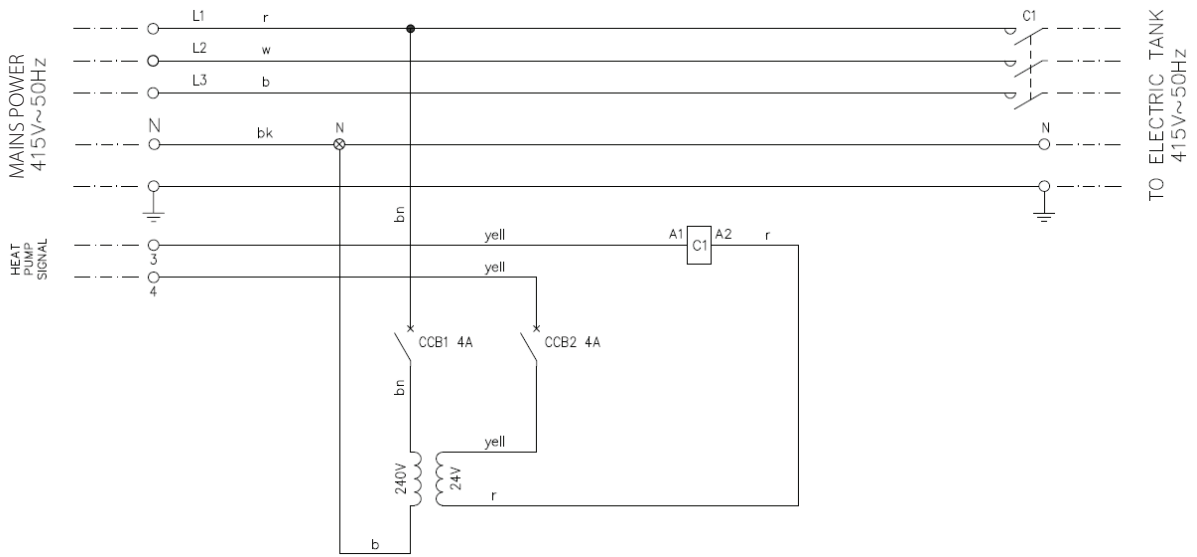
**POWER SUPPLY TO ELECTRIC TANK**

Connect all active, neutral and earth wires directly from the contactor or terminals and wire to electric tank. Normally each 3-phase auxiliary relay box works with one electric tank. Refer to the electric tank wiring diagram for tank wiring.

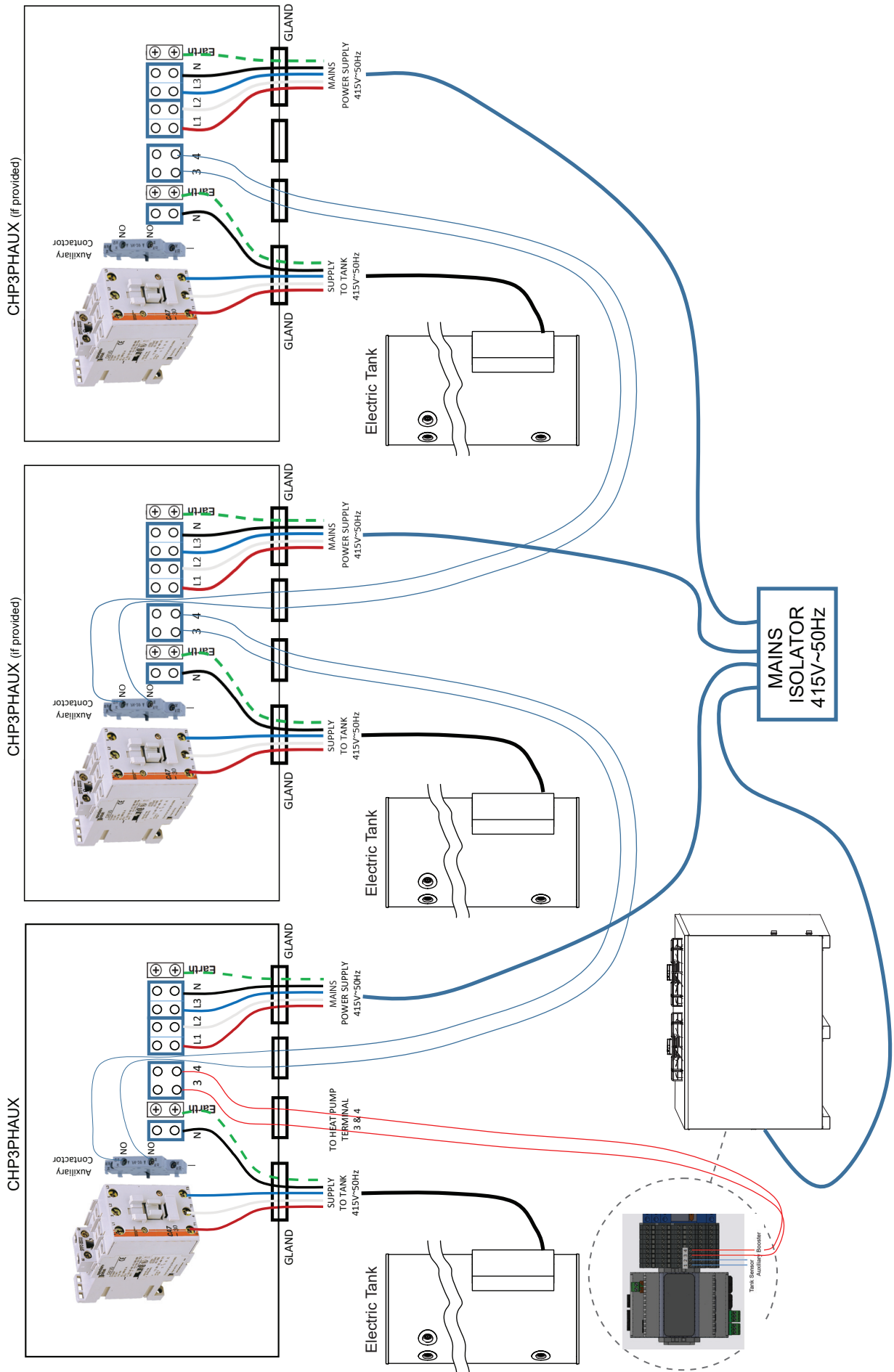


# WIRING DIAGRAMS

## ELECTRICAL DIAGRAM



**MULTIPLE ELECTRIC TANKS WITH ONE HEAT PUMP CONNECTION**



# Rinnai Australia Pty Ltd

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100 Atlantic Drive, Keysborough, Victoria 3173  
P.O. Box 460, Braeside, Victoria 3195  
Tel: (03) 9271 6625  
Fax: (03) 9271 6622

## **National Help Line**

Tel: 1300 555 545\* Fax: 1300 555 655  
*Monday to Friday, 8.00 am to 5.00 pm EST.*

## **After Hours Hot Water Service Line**

Tel: 1800 000 340\*

*\*Cost of a local call may be higher from a mobile phone.  
(National calls from public phones in Australia are free.)*

For further information visit [www.rinnai.com.au](http://www.rinnai.com.au)  
or email [enquiry@rinnai.com.au](mailto:enquiry@rinnai.com.au)

Rinnai has a Service and Spare Parts network with personnel who are fully trained and equipped to give the best service on your Rinnai appliance. If your appliance requires service, please call our National Help Line.

With our policy of continuous improvement, we reserve the right to change, or discontinue at any time, specifications or designs without notice.